

WHAT IS CLAIMED IS:

1. A rotary head apparatus, comprising:
  - a rotary drum whose outer circumferential surface serves
  - 5 as a sliding surface relative to a recording medium; and
  - at least one magnetic head lying on the sliding surface of the rotary drum,
  - wherein the magnetic head comprises base members juxtaposed along a sliding direction relative to the
  - 10 recording medium; and a playback magnetic element disposed between the base members and slanted at a predetermined azimuth angle with respect to the sliding direction,
  - wherein a recording-medium opposing surface of the magnetic head is wider in a longitudinal direction serving as
  - 15 the sliding direction than in a lateral direction perpendicular to the longitudinal direction,
  - wherein the opposing surface is curved in two convex shapes extending towards the outside of the rotary drum, one along the longitudinal cross section of the magnetic head
  - 20 extending across the center line of the magnetic head laterally dividing the magnetic head into two parts, and the other along the lateral cross section of the magnetic head orthogonal to the center line, and the opposing surface is formed such that the apex of the lateral cross section is
  - 25 gradually displaced from the center line as distancing itself from the center of the opposing surface in the longitudinal direction and is gradually displaced from the center line in the opposite direction to the above displacement as

distancing itself from the center in the reverse longitudinal direction, and

wherein the opposing surface is formed such that the two displacements of the apex laterally away from the center line  
5 in a sliding area of the opposing surface with the recording medium are respectively at most 2  $\mu\text{m}$ .

2. The rotary head apparatus to Claim 1, wherein the opposing surface has a pair of long sides extending in the  
10 longitudinal direction and being parallel to each other; a pair of short sides slanted at the same angle as the azimuth angle and being parallel to each other; and a pair of acute angular corners formed by the long sides and the short sides, and

15 wherein the apex is displaced from the center line and comes closer to either of the corners as distancing itself from the center of the opposing surface.

3. A magnetic playback apparatus, comprising the rotary  
20 head apparatus according to Claim 1, wherein, when the recording medium is wound around the circumferential surface of the rotary drum by a predetermined angle, and the rotary drum of the rotary head apparatus is driven to rotate, the magnetic head slides on the recording medium as the recording  
25 medium moves in the longitudinal direction, and the magnetic head thus reads magnetic information at least recorded in the recording medium.

4. The magnetic playback apparatus, comprising the rotary head apparatus according to Claim 2, wherein, when the recording medium is wound around the circumferential surface of the rotary drum by a predetermined angle, and the rotary  
5 drum of the rotary head apparatus is driven to rotate, the magnetic head slides on the recording medium as the recording medium moves in the longitudinal direction, and the magnetic head thus reads magnetic information at least recorded in the recording medium.